**Difference between Python 2.x and Python 3.x**

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| **Type** | **Python 2.x** | **Python 3.x** |
| Division operator | print 7 / 5  print -7 / 5  Output in Python 2.x  1  -2 | print (7 / 5)  print (-7 / 5 )  Output in Python 3.x :  1.4  -1.4 |
| print function | print 'Hello, Student'  if we use parenthesis in python 2.x then there is no issue | print ('Hello, Student')  if we don’t use parenthesis in python 3.x, we get SyntaxError. |
| Unicode | In Python 2.x , implicit str type is ASCII | In Python 3.x , str type is also Unicode |
| Input | In Python 2.x we use raw\_input() function to accept user’s input.  Raw\_input reads the input as string | In Python 3.x we use input() function to accept user’s input.  The input() reads it as string object. |
| Xrange() | In Python 2.x, we use xrange(). It does not support slice and other list method. | In Python 3.x, we use range(). It supports all type of list method. |
| TypeError | It is not present in Python 2.x  print [10,20]>’hello’ generates no error | TypeError is raised as a waring  print( [10,20]>’hello’)  output:  TypeError: '>' not supported between instances of 'list' and 'str' |
| Error handling | tyr:  print i  except NameError:  print ‘ Name error generated’  output:  Name error generated | tyr:  print i  except NameError:  print( ‘ Name error generated’)  output:  name i is not defined Name error generated |
| Raise exception | You can raise an exception with or without using parenthesis | Parenthesis is mandatory |
| .next() and next()function | Both are supported by Python 2.x | Only next() function is supported |
| Cmp() method in list | It is supported by Python2.x | Not supported |